

Huanglongbing

Citrus Greening Disease

Yellow shoots on infected sweet orange plant



Huanglongbing or Citrus Greening Disease

Huanglongbing (HLB) is also known as Citrus Greening Disease or Yellow Dragon Disease. It is a very destructive bacterial disease of citrus and citrus relatives. It is spread primarily by psyllid insect vectors and through grafting with infected budwood. HLB represents a serious threat to the citrus industry worldwide and especially in California. Three separate strains of HLB have been discovered and identified: Asian, African (South Africa) and South American (Brazil).

Symptoms include yellow shoots, leaf mottle, small upright leaves and lopsided fruits with a bitter flavor. There is no known control or cure for this disease once a tree becomes infected. Diseased trees are non-productive, have a shortened lifespan and must be removed and destroyed to prevent further spread of HLB.

This disease is spread readily by the Asian citrus psyllid (*Diaphorina citri*), which is widespread in Florida, and found in parts of Texas, Hawaii and Mexico. The insect vector feeds on the new growth flush. Orange jasmine (*Murraya paniculata*), an ornamental citrus relative, is the preferred host for the psyllid. The Asian strain of HLB was discovered for the first time in August 2005 in southern Florida's Dade County and found in subsequent surveys to be widespread throughout the state. Neither the disease nor the vector has been found in California at this time.

If you suspect you have citrus with HLB disease – based on the presence of the symptoms described or of the insect vector – please contact the California Department of Food and Agriculture at 1-800-491-1899.



▼ Nymphs



◆ Adults

Asian citrus psyllid



Photo Credits:
USDA ARS (Asian citrus psyllid nymphs)
M. Keremane, USDA ARS National Clonal Germplasm Repository for Citrus and Dates (psyllid adult, top)
M. Luque-Williams (psyllid adult, bottom; symptomatic fruit and leaves)



Lopsided fruit with aborted seeds



Symptomatic fruit and leaves



Call to Report:

1-800-491-1899